

NCR Docket No. 9226

CLAIMS

1. (Currently amended) A method for use in tracking the actions of an Internet user, the method comprising:

loading data from ~~one or more a plurality of transaction logs of one or more a plurality of Internet servers into a database system a single database table managed by plural parallel processing modules of a database system~~, where the data includes an entry for each request to the Internet server, including information identifying which user submitted the request and information identifying the time at which the request was received; and

executing a database query across the parallel processing modules ~~using a moving difference database management function~~ to select from the data all entries associated with a particular user and corresponding to a single session of that user.

2. (Original) The method of claim 1, where the step of selecting includes selecting entries with time stamps lying in a predetermined range.

3. (Original) The method of claim 1, where the step of selecting includes comparing time stamps of entries and selecting each entry for which the time stamp differs from the time stamp of another entry by less than a predetermined amount.

4. (Original) The method of claim 3, where the step of selecting includes selecting each entry for which the time stamp differs from the time stamp of another entry by less than 30 minutes.

5. (Original) The method of claim 1, also including sorting the selected entries chronologically to reconstruct the user's clickstream.

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6. (Currently amended) A computer program, stored on a tangible storage medium, for use in tracking the actions of an Internet user, the program comprising executable instructions that cause one or more computers to:

load data from ~~one or more~~ transaction logs of ~~one or more~~ a plurality of Internet servers into a database system ~~single database table~~ managed by plural parallel processing modules of a database system, where the data includes an entry for each request to the Internet server, including information identifying which user submitted the request and information identifying the time at which the request was received; and

execute a database query across the parallel processing modules using a moving difference database management function to select from the data all entries associated with a particular user and corresponding to a single session of that user.

7. (Original) The program of claim 6, where, in selecting entries, the computer selects entries with time stamps lying in a predetermined range.

8. (Original) The program of claim 6, where, in selecting entries, the computer compares time stamps of entries and selects each entry for which the time stamp differs from the time stamp of another entry by less than a predetermined amount.

9. (Original) The program of claim 8, where, in selecting entries, the computer selects each entry for which the time stamp differs from the time stamp of another entry by less than 30 minutes.

10. (Original) The program of claim 6, where the computer also sorts the selected entries chronologically to reconstruct the user's clickstream.

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11. (Currently amended) A database system comprising:

a plurality of one or more data-storage facilities for use in storing data received from one or more transaction logs of a plurality of one or more Internet server computers, where the data includes an entry for each request to the Internet server computers, including information identifying which user submitted the request and information identifying the time at which the request was received;

plural parallel processing modules configured to manage the data stored in the data-storage facilities; and

a database-management component configured to execute a database query across the parallel processing modules using a moving difference database management function to select from the data all entries associated with a particular user and corresponding to a single session of that user;

~~where the data received from the one or more transaction logs is loaded into a single database table managed by the plural processing modules.~~

12. (Original) The system of claim 11, where the database-management component is configured to select entries with time stamps lying in a predetermined range.

13. (Original) The system of claim 11, where the database-management component is configured to compare time stamps of entries and to select each entry for which the time stamp differs from the time stamp of another entry by less than a predetermined amount.

14. (Original) The system of claim 13, where the database-management component is configured to select each entry for which the time stamp differs from the time stamp of another entry by less than 30 minutes.

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15. (Original) The system of claim 11, where the database-management component is configured to sort the selected entries chronologically to reconstruct the user's clickstream.

16. (Previously Presented) The method of claim 1, further comprising processing the data loaded into the single database table to extract from each entry in the single database table the information identifying which user submitted the request and the information identifying the time at which the request was received.

17. (Previously Presented) The method of claim 16, further comprising storing the extracted information in a database table having plural columns, one for the information identifying which user submitted the request, and another for the information identifying the time at which the request was received.

18. (Previously Presented) The method of claim 1, where loading data into a single database table includes loading data into a table having a single column, where the single column includes a row for each entry in the one or more transaction logs of the one or more Internet servers.

19. (Previously Presented) The program of claim 16, where the one or more computers also process the data loaded into the single database table to extract from each entry in the single database table the information identifying which user submitted the request and the information identifying the time at which the request was received.

20. (Previously Presented) The program of claim 19, where the one or more computers also store the extracted information in a database table having plural columns, one for the information identifying which user submitted the request, and another for the information identifying the time at which the request was received.

21. (Previously Presented) The program of claim 16, where the one or more computers also, in loading data into a single database table, load data into a table having a

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single column, where the single column includes a row for each entry in the one or more transaction logs of the one or more Internet servers.

22. (Currently Amended) A method for use in tracking the actions of an Internet user, the method comprising:

loading data from ~~one or more~~ transaction logs of a plurality of one or more Internet servers across plural parallel processing modules of a database system, where the data includes an entry for each request to the Internet server, including information identifying which user submitted the request and information identifying the time at which the request was received;

extracting from the loaded data the information identifying which user submitted the request and the information identifying the time at which the request was received;

storing the extracted information in a database table having plural columns, one for the information identifying which user submitted the request, and another for the information identifying the time at which the request was received; and

executing a database query across the parallel processing modules using an MDIFF extension to SQL as a function to select from the database table all entries associated with a particular user and corresponding to a single session of that user.

23. (Currently Amended) A computer program, stored on a tangible storage medium, for use in tracking the actions of an Internet user, the program comprising executable instructions that cause one or more computers to:

load data from ~~one or more~~ transaction logs of ~~one or more~~ a plurality of Internet servers across plural parallel processing modules of a database system, where the data includes an entry for each request to the Internet server, including information identifying which user submitted the request and information identifying the time at which the request was received;

extract from the loaded data the information identifying which user submitted the request and the information identifying the time at which the request was received;

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store the extracted information in a database table having plural columns, one for the information identifying which user submitted the request, and another for the information identifying the time at which the request was received; and
execute a database query across the parallel processing modules using a moving difference database management function to select from the database table all entries associated with a particular user and corresponding to a single session of that user.

24. (Currently Amended) A database system comprising:

a plurality of one or more data-storage facilities for use in storing data received from ~~one or more~~ a plurality of transaction logs of ~~one or more~~ a plurality of Internet server computers, where the data includes an entry for each request to the Internet server computers, including information identifying which user submitted the request and information identifying the time at which the request was received;

plural parallel processing modules configured to:

extract from the stored data the information identifying which user submitted the request and the information identifying the time at which the request was received; and

store the extracted information in a database table having plural columns, one for the information identifying which user submitted the request, and another for the information identifying the time at which the request was received; and

a database-management component configured to execute a database query across the parallel processing modules using an MDIFF extension to SQL to select from the database table all entries associated with a particular user and corresponding to a single session of that user.